

INKJET DIGITAL TEXTILE PRINTS DESIGN: SIMULATION AS INSPIRATION

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ABSTRACT

Visual imagery has been source of communication before the inception of language, script, knowledge formulation and deliverance processes. Visual imagery is not only a form of strong communication, but also a form of perception based on interpretative science, allowing the human mind to connect with colors, forms, visual & tactile textures, cultural references and metaphorical meanings. A visual delivers complete impact on human brain for the formulation of composing meaningfulness.

Digital design tools are adopted today by masses, bringing the designing aptitude in the hands of people. It gives people the power to create and convert imagination in real time. The pace of design, development and imagination is fast. Digital design tools are no more restricted to creation of designs, but provide quick transformation and execution with utmost sensitivity (technologies evolving at a continuous pace). While the design tools are accessible and user friendly to people with multi-cultural exchange and exposure; inkjet digital printing technology in textiles has created new phase of metaphoric imagination. The source of design inspiration has expanded tremendously due to incorporation of scanned and photographic surfaces/images increasingly in Textile Design. This research paper explores the new language of visual simulation as an inspiration and metaphor in design, especially with adaptation of digital printing technology in fashion and textiles.

KEYWORDS; Inkjet Digital Printing, Textile Design, Visual Imagery, Inspiration & Simulation

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INTRODUCTION

Due to the augmentation of inkjet digital printing technology, it is observed among designs that creative thinking and design approach is shaping up to new design directions and exciting designerly practices. Textile designers usually work with industrial constraints of printing while working with rotary, screen or block print, although each of these techniques provides a certain amount of flexibility and offers its own set of benefits for production feasibility and cost viability. However, it is challenging as well as exciting to work with the widen horizon of flexibility offered by Inkjet Digital printing technology with textiles. The challenge of working with technology brings new inquiries that lead to unconventional ways for designers to conceptualize designs. It also pushes design associations and studios to embrace new design thinking in their field of practice to generate commercial value. As per Gardner *“Print adds value; value that can be measured both economically and emotionally”* (Gardner, 2012).

The use of CAD and CAM among designers has already been popular in conventional methods of printing, however it has further reduced the time span between designing and printing in Inkjet printing methods. Inkjet printing offered a newer approach to high end printing and bespoke services to the printed textile industry. As compared to the conventional methods of printing, Inkjet printing offers lower cost involvement and viability for shorter production runs. Bespoke services, higher quality of detailed multi-color visual imagery can be successfully printed on textiles

with unlimited color way options (Christina Cie, 2015). Textile designers look forward to the future potential of inkjet printing in terms of not just reducing volumes and producing diversity in design, but also innovative methods of prototyping, production methods and business models. Designers also look forward to creating and adapting to newer methods of approaching the textile design process (Ryall, Helen, 2010). Designing offers great potential for the generation of knowledge and systems. Design is closely connected with Inkjet textile printing in the form of visual imagery, motif and patterns (Parsons, Jean L.1, Campbell, J. R. 2004). It is observed that Digital textile print design process begins as a random process and evolves as systematic progression as it moves closer to the production process. The linearity offered by Inkjet Digital printing technology makes the complete process of prototyping to production and re-production of repeat orders flexible and efficient (Parsons, Jean L. & Campbell, J. R. 2004). The flexibility to be able to design engineered print design for stitched products such as apparel for various sizes enhances customized design opportunities. Integration of instructions such as stitching details/sizes/pattern as into digital print design makes the production process leaner (May-Plumlee, Traci, JiHyun Bae, 2005). Digital printing of textiles at present involves a wide range of processes and practitioners. Inkjet textile printing offers flexible prospects of innovative and stimulating ways of interlinking numerous levels of hand-made and digital elements and methods (Carden Susan, 2011). The technology has formed a creative bridge between handmade and digital design processes. Thus, designers continuously look forward to exploring new methods of design and inspiration to make the most of this technology.

METAPHOR FROM LINGUISTICS TO DESIGN

In linguistic metaphor may be defined as a symbolic representation of a concept from one etymological category (the source) used about a phenomenon normally referred to by concepts from a different linguistic category (the target), (Andersen & Madsen 1988). The major linguistic categories are normally considered to be animate, inanimate, human, animal and physical objects. For example, the phrase "Life is a bed of roses" is metaphorical. The term "Life" (phenomenon) is represented by the phrase "bed of roses" (another object/element). Metaphor is a conceptual reference presenting an element in one object/subject making an association by referring to another element. The referred element may or may not be present in the first element and portrays entire different characteristics (Ortony, 1979) & (Lakoff & Johnson 1980).

Metaphors are commonly associated with language, but metaphors can bring impactful solutions through visuals and may be used and expressed through design to bring meaningful changes and values (Master the Metaphor George Felton January 17, 2008).

George Felton describes two types of metaphors for use in design,

- **Pure Metaphor:** Pure metaphor is a representation of absolute principally different elements, creating direct visual message overlapping with an indirect one. For example: In graphic design as explained by George Felton, the image is something else and it is portraying an entirely different message. It is an indirect interpretation of the visual components. One of the examples is a digital print design created by Mary Katranzou. She used the highly stylized architecture of seventies on the garments for women, stating that she prefers putting room on the woman rather than the woman in the room. Expressing such messages through use of room architecture, aesthetic brings a metaphorical aspect to the digital textile print design on a wearable garment (Jessica Bumpus, 2010).
- **Fused Metaphor:** Fused metaphor is a representation of absolute principally different elements, merging them

together to create a hidden meaning in an indirect manner. For example: In graphic design as explained by George Felton, the images created for absolute campaign are a perfect example of fused metaphor. It depicts overlap and blends different elements to create unified meaning.

Metaphor in design usually takes place, when a client's design brief indicates a design concept to be derived from another product or design as a reference point (Zeal, 2007).

SIMULATION AS INSPIRATION AND EMERGING DESIGN THINKING



Figure 1: Botanical Layers Design Collection by Masha Reva and Syndicate, AW2013-14, Retrieved on 12.12.2016 from <http://blog.patternbank.com/masha-reva-x-sndct-botanical-layers>

The popularity of digital tools has pushed the boundaries of design thinking for textile design. The thinking process in design is more hybrid than ever. However, there are various aspects of metaphorical association and representation in digital design. The metaphorical version of simulating the Adobe Photoshop digital elements successfully intertwined with Botanical Layers print designs are created by Masha Reva and Syndicate. The collection is a combination of juxtapositions of digital elements and reflects the downloading process by indicating the download bar creates conversational value and impactful meaning. It compels the viewer to transit in a visual waiting mode by looking at still printed textile with interesting placements of nature and digital elements. Similar trends were reflected named as “Future Florals” in Stylesight forecast for Spring Summer 2015. The digital aspects have not just become the main feature, but also act as metaphorical inspiration for design.



Figure 2: Molly Williams – Digitally Printed Acrylic Chair and Silk Throw – The William Morris Gallery 2012, Molly Williams Interview: Memory and Metaphor, Artist Interview by Sam, 2012

Retrieved on 12.12.2016 from: <http://www.textileartist.org/memory-and-metaphor-molly-williams/>

Molly Williams, a contemporary felt textile artist has produced work of textile art portraying PAST as metaphor using digital design. The work was presented at a Designer Craftsmen exhibition at London's William Morris Gallery 2012. The designer uses past as metaphor and blend with modern clear acrylic chair in a unique manner, giving print design an edge over the traditional approach.

People's print: Peoples print itself is a method for today's textile and fashion design scenario. With the evolution of e-commerce services of uploading design Spoon flower, Fabric on Demand, Fabric press, Chimora Prints, Construct etc., one can witness design conceptualization shift from the designers to the common people. The big question is often asked regarding the photographic designs as design or photography. A photograph or scanned image is a simple translation... from photography to print? As the stages of design thinking is not so much involved at stages of design process, hence these are major references of simulation. In such cases, a large format photograph is simply selected and translated in a print on the predefined garment from the online archive. Digital design is creating opportunities in mass customization and localized design market catering to the fast evolving fashion trends. Techniques such as digital photography is in the hands of common people, exposed to world travel, multi-cultural exposure and well equipped with the popular digital tools. The newer design processes created by a shared platform and endorsed by people are a metaphorical development in a democratic approach to design thinking.

Conventional methods of design techniques require materials such as paper/fabric, medium such as paints, various techniques such as hand painting and tools to realize the artworks. Digital design provides a virtual facility incorporating medium, material, tools and techniques embedded as one in digital systems of designing. The digital medium has simulated the effects of hand techniques and tools, providing an infinite digital canvas for the designer to work in digital landscape with layers. Enhancing visualization capacities digital environment has increased and simplified the design feedback response time through smart editing (interrogatingfashion.org).

Simulation is found in the conventional methods of printing as well. Simulation usually was practiced to produce an economical version of another surface/technique other than print to create visual appeal. For example patchwork technique can be simulated in printing by placing different prints in patchwork look-alike layout/arrangement and incorporate stitching lines as dash line drawing to create a simulated patchwork print. Patchwork is an expensive technique,

however simulated print of patchwork would be more economical and easy to produce. Contrary to the use of Simulation in the past; today, it has become valuable and found a new meaning in Digital Textile print design. Simulation is more than the transferring of a scanned or photographed image on the textile surface using inkjet digital printing. It links the human mind with emotive characteristics such as memory, user-friendliness and also enhances visibility of greater details in a visual. Camouflage is one such example, where diverse terrains aerial view images can be translated to print design making it highly user-friendly for military and security staff. Raw texture of jute fabric scan may be utilized for apparel construction on a smoother fabric, making it visually appealing and comfortable to wear at the same time. Theatrical period costumes are made alive through the simulation of Museum textiles to create an authentic visual experience. The popularity of digital tools has given birth to the new design thinking. The thinking process in design is more hybrid than ever. However, there are various aspects of metaphorical association and representation in digital design and Simulation is one of them (As per observations made by the researcher through study of existing designer's work worldwide using Inkjet Digital printing on textiles).

DISCUSSIONS

Digital technology in textile printing has begun a new creative response among people forming new bridges of thought process and beginning a new design culture. The design culture today is shared by designers and the common people. Digital print design remains a metaphor in technology and creativity in textile and fashion design both. Design is becoming decentralized from the hands of designers to the people. New aesthetic voices can be heard from all across the globe and often describes new themes, inspirations sometimes extremely historical to exceptionally futuristic. Simulation has been witnessed as an inspiration in textile design in far more diverse and creative expression. Simulation has found a place in the inspirational design by people and designers both for various needs and desires.

FUTURE ASPECTS

Digital technology is expected to grow at a continuous pace. It is a preferred technology among designers today, not only due to flexibility it provides for design and production, but also due to the new requirements of unique business opportunities, new learning environment, acceptability and supporting systems such as online promotion, social media. It is a metaphorical moment in the history of textile print design enhancing the scope of design inspiration from various perspectives, exploring techniques and processes. The designers consider end users of fashion and textiles in many ways to meet their diverse requirements and simulation is one of the constant sources of inspiration.

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